REMARKS

The Office Action mailed February 6, 2009 noted that claims 67-69, 71-76, 78-89, 91-102 and 104-110 were pending, and rejected all claims. The rejections are traversed below.

<u>Status of Claims</u>

Claims 67, 75, 79, 84, 88, 89, 92, 94, 101, 107, 109 and 110 have been amended, claims 1-67, 68-74, 76-78, 80-83, 85-87, 90, 91, 95-100 and 102-106 have been cancelled, new claims 111-144 have been added and, thus, in view of the forgoing claims 67, 75, 79, 84, 85, 89, 92-94, 101, 107 and 109-144 remain pending for reconsideration which is requested. No new matter has been added.

<u>Clarification of Action Requested</u>

On page 4 of the Action, the Action appears to reject various claims over Cozza. Howevre, the text of the rejection refers to Arnold.

<u>101 Rejection</u>

The Office Action rejected claims 81, 84, 85, 88, 92 and 109 under 35 U.S.C. section 101 as non-statutory. The claims have been amended in consideration of the Action comments and it is submitted they satisfy the requirements of the statute. Withdrawal of the rejection is requested.

<u>Rejections</u>

On pages 4 and 5, the Action rejects all pending claims variously over Cozza and Arnold.

Claims 67, 75, 79, 84, 88, 89, 92, 94, 101, 107, 109 and 110 have been amended to emphasize that the infected/quarantine file is converted into encoded data "by executing an encoding process that <u>converts an infected file</u> in an infected condition into another encoded data when the infected file is detected" (emphasis added). That is, the infected file is converted.

Cozza discusses storing initial state information about a file in a cache of a non-volatile storage medium. Later, when the file is subsequently scanned, the current state information is compared with the initial state information and if they differ the file is then scanned for viruses. Cozza has not been shown to teach or suggest converting an infected file into another encoded data.

Arnold periodically monitors a data processing system for anomalous behavior that may indicate an infection by a virus, worm, etc. and automatically scans for undesirable software

using a signature. Arnold calls for a human to create the signature by converting the binary machine code of a virus into assembler code and picking a part of the virus code as the signature. In particular, Arnold states:

> A widely-used method for the detection of computer viruses is known as a virus scanner. A virus scanner employs short strings of bytes to identify particular viruses in executable files, boot records, or memory. The byte strings (referred to as signatures) for a particular virus must be chosen with care such that they always discover the virus, if it is present, but seldom give a "false alarm", known as a false positive. That is, the signature must be chosen so that the byte string is one that is unlikely to be found in programs that are normally executed on the computer. Typically, a human expert makes this choice by converting the binary machine code of the virus to an assembler version, analyzing the assembler code, selecting sections of code that appear to be unusual or virus-like, and identifying the corresponding bytes in the binary machine code so as to produce the signature. Wildcard bytes can be included within the signature to provide a match with any code byte appearing in a virus.

(See Arnold, col. 1, lines 45-63)

As can be seen, Arnold discusses converting a part of the virus code. Whereas claims 67, 75, 79, 84, 88, 89, 92, 94, 101, 107, 109 and 110 call for converting "an infected file" into another encoded data. Withdrawal of the rejection of claims 67, 75, 79, 84, 88, 89, 92, 94, 101, 107, 109 and 110 is requested.

The dependent claims depend from the above-discussed independent claims and are patentable over the prior art for the reasons discussed above. The dependent claims also recite additional features not shown to be taught or suggested by the prior art. For example, claim 89 calls for when a file is quarantined it is "unable to be executed". It has not been shown that Arnold and/or Cozza teach or suggest such. It is submitted that the dependent claims are independently patentable over the prior art.

<u>New Claims</u>

New independent claims 111-144 have been added.

Regarding independent claims 111 and 128, similar to the claims 67, 75, 79, 84, 88, 89, 92, 94, 101, 107, 109 and 110 discussed above, Cozza and Arnold fail to disclose "an encoding process that converts an infected file in a infected condition into another data".

Regarding independent claims 117 to 134, Cozza and Arnold fail to disclose "converting an infected file into other encoded data" and "restoring the encoded data back to the original state of the infected file before the infected file was converted".

Regarding independent claims 123 and 140, similar to the claims 67, 75, 79, 84, 88, 89,

92, 94, 101, 107, 109 and 110 discussed above, Cozza and Arnold fail to disclose a method performed by a storage device which includes "converting an infected file into another encoded data" and "storing the encoded data into a particular area on the storage".

It is submitted that new claims 111 to 144 are allowable over Cozza and Arnold.

Support For New Claims

The support for new claims 111-144 can be found throughout the Specification and Figures. One particular example of where support can be found variously for claims 111-144 is in figure 2 and the accompanying description in columns 7-10, in figures 10-12 and the accompanying description in columns 12-13, in figure 21 and the accompanying description in column 19, in figure 15 and the accompanying description in columns 14-15, and in figure 22 and the accompanying description in columns 19 and 20.

Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.
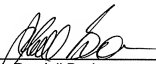
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: _____8/6/7_____   By: _____
                                        J. Randall Beckers
                                        Registration No. 30,358

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501